

# **Addressing Immunization Disparities in Underserved Communities**

**A Partnership Between CME Outfitters (CMEO) and  
the National Black Church Initiative (NBCI)**

# NBCI Immunization Survey Results



# NBCI Immunization Survey Results

NBCI distributed a 5-question survey to members across the United States related to adult vaccination

**12,457**  
Surveys Distributed



**4,341**  
Returned Surveys

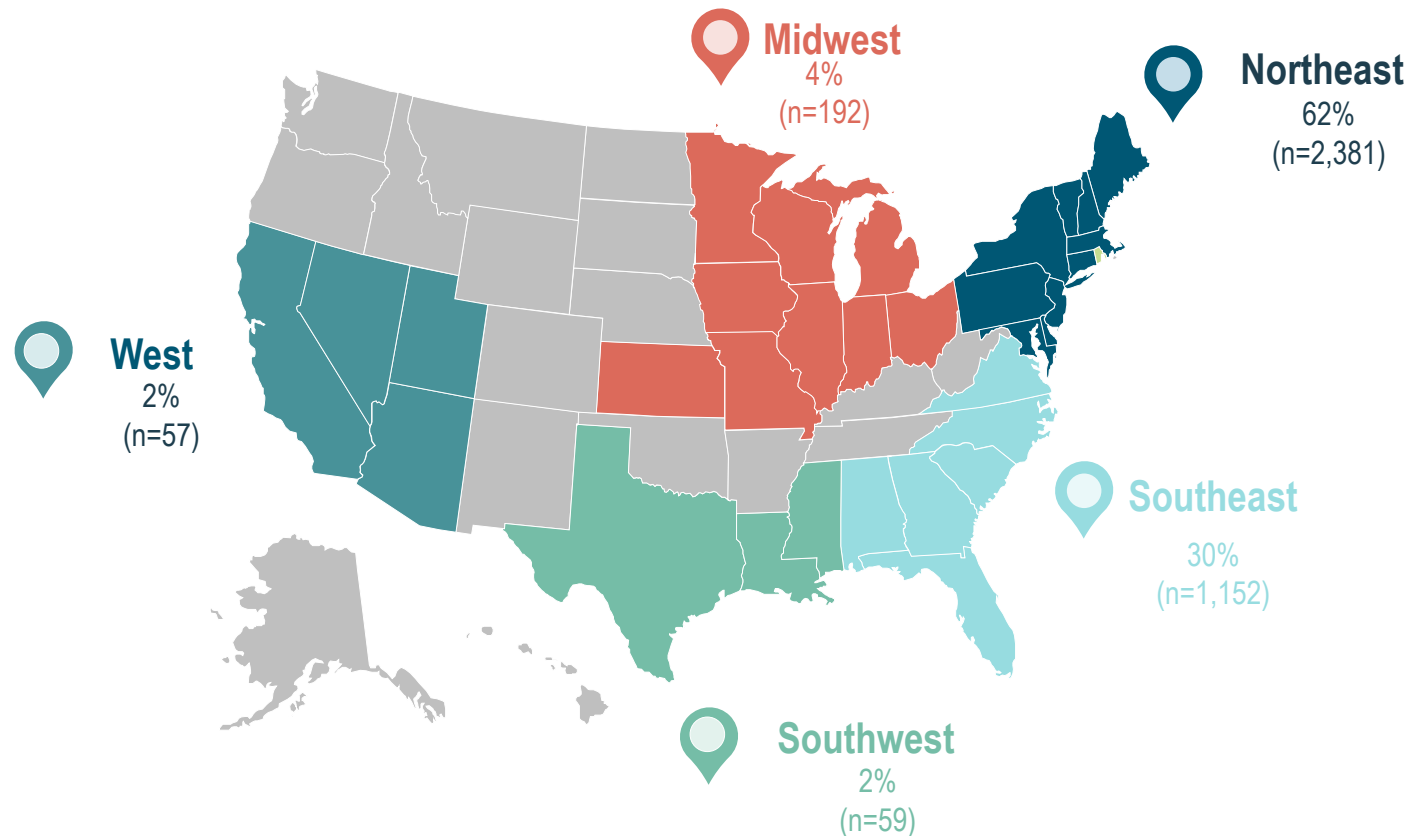


**3,841**  
Completed Surveys



Overall Response  
Rate:  
**31%**

## NBCI US Regions with Number & Percent Responses to Survey



# NBCI Survey – Vaccination Status (N=3,841)

NBCI Survey Question: Do you know if you are up to date on all of your immunizations vaccine (shots)?



2.3% of respondents responded, “What are you talking about?”

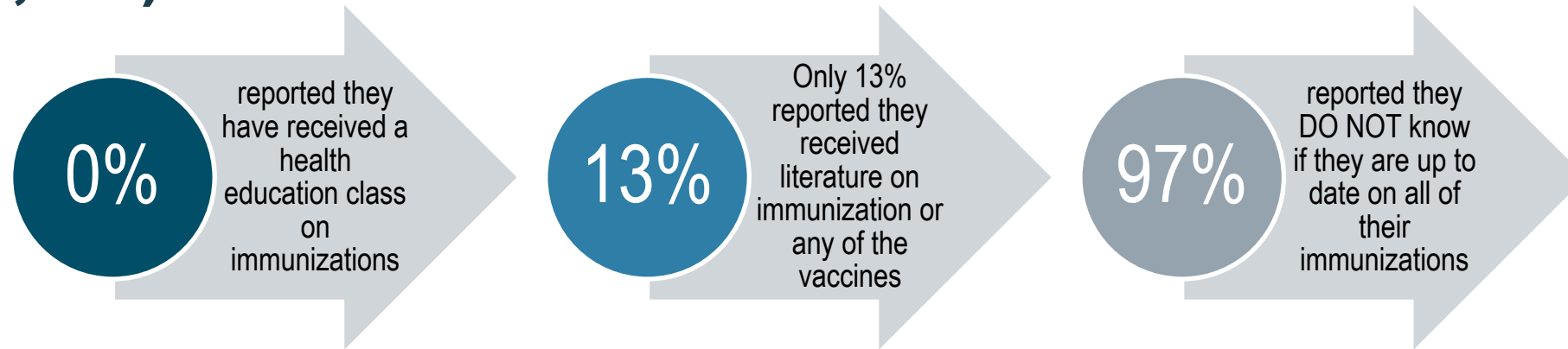


# 1.7%

of the 3,800+ NCBI survey respondents only 65 (1.7%) reported they **knew** if they were **up to date** on all of their **immunizations**

This data starkly reinforces government reports that Black individuals are 10% less likely to receive influenza vaccines than their White counterparts and are significantly less likely to be up to date on vaccines for tetanus, hepatitis A and B, and shingles, in addition to vaccines for COVID-19 and pneumococcal disease.<sup>1,2</sup>

# NBCI - Access to Education Regarding Immunizations (N=3,841)



***Lack of education on immunizations will result in lack of knowledge in vaccine status.***

- In a study of 1,488 women, 95% trust their medical doctor to provide information regarding HPV and HPV vaccine. However, Black women were significantly more likely to trust information obtained from the following compared to White women:<sup>1</sup>

- Family members
- Television
- Religious organizations
- Government health agencies

- In general, Black patients preferred the following sources of information for health information:<sup>2</sup>

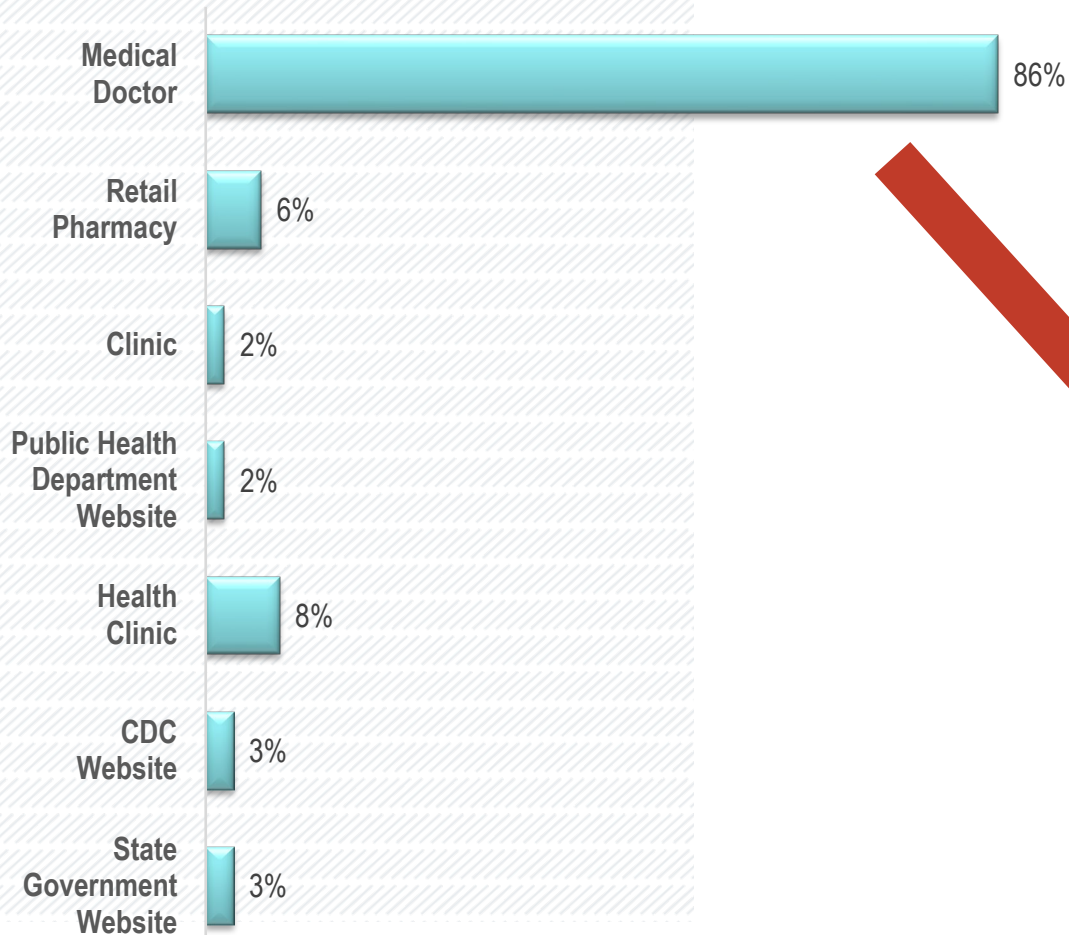
- Newspapers/magazines
- Radio
- Internet
- Television
- Government
- Charitable organizations
- Religious organizations

***Education may be provided in non-traditional locations, such as religious organizations or through a community health worker***

# Access to Immunizations Needed (N=3,841)

NBCI Survey Question: Do you know where you will go to get the list of the vaccines you need?

NBCI Survey Results



NBCI Survey Question: Do you have a doctor?

**97% Responded “No”**



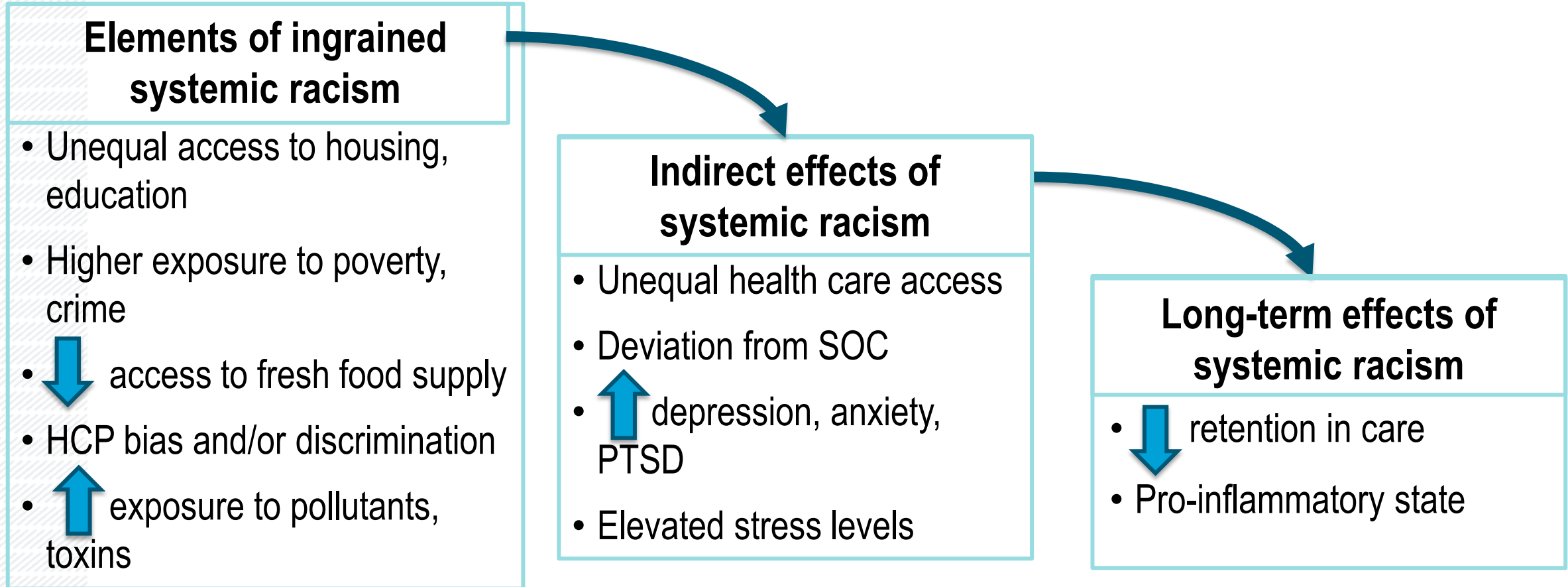
Based on recent Kaiser Family Foundation (KFF) data, 13% of U.S. Black adults do not have a personal doctor/health care provider.



The results reveal an interesting gap in that community members understand that HCPs, particularly physicians, are significant resources related to vaccination; however, 97% of the respondents do not have a regular medical doctor. The data far exceeds the KFF data that represents national populations.

# Gap Analysis

# Health Disparities: How We Got Here<sup>1-5</sup>



HCP = health care professional; PTSD = post-traumatic stress disorder; SOC = standard of care

1. Hasan B, et al. *Clin Rheumatol*. 2022;31:1–13. 2. CME Outfitters, LLC. 2021. Equity and Health Care Disparities: The Role of Leaders in Addressing the Crisis. 3. CME Outfitters, LLC. 2021. Addressing Racial Disparities in Orthopedic Care. 4. CME Outfitters, LLC. 2021. Achieving Equity in the Management of Chronic Pain: Treating the Whole Patient. 5. CME Outfitters, LLC. 2021. Parameters of Pain Care: Mitigating Racial Disparities in Patients with Chronic Pain.

# Reasons for Disparities in Vaccination Coverage

- Structural racism: aspects of the healthcare structure that lead to disparities
  - Access
  - Insurance status
  - Not having a primary care doctor
  - Delaying care due to cost
  - Provider bias
  - Historical mistreatment leads to medical mistrust
  - Language and cultural barriers
- Vaccine hesitancy: reluctance to get vaccination due to perceptions of:
  - Safety concerns/side effects
  - Trust of medical providers
  - Low health literacy

## Medical Mistrust and Its Impacts

Trust in health care among Americans has declined in recent decades, and it's worse among Black Americans.

Black Americans are more likely than whites to say they don't trust their physician

In an October 2020 poll, 7 of 10 Black Americans say they're treated unfairly by the health care system and 55% percent say they distrust it.

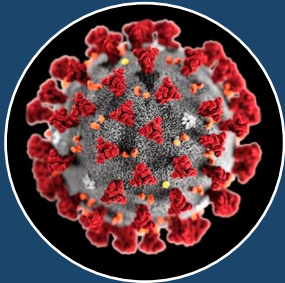
Mistrust may prevent people from getting care.

People who say they mistrust health care organizations are less likely to take medical advice, keep follow-up appointments, or fill prescriptions.

People who say they mistrust the system are much more likely to report being in poor health.

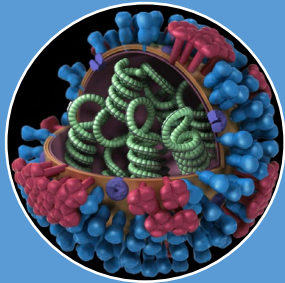
# Inequitable Factors in Specific Vaccines

## COVID-19



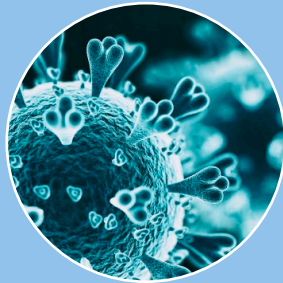
- AAMR Latino 77% ↑  
vs. White
- AAMR Black 67% ↑  
vs. White
- Highest AAMR =  
Indigenous Americans
- ↑ Death in POC

## Influenza



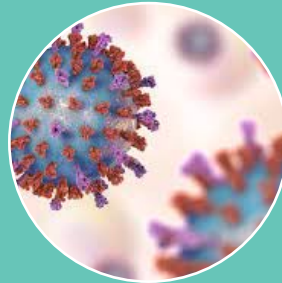
- Highest group  
vaccinated only 51%
- POC less than half  
vaccinated
- Low pre-pandemic and  
now bigger gap with  
COVID and Monkeypox

## HIV



- 14% still undiagnosed
- 42% new infections in  
African Americans
- Need to normalize  
sexual health in  
conversation

## RSV



- ↑ Hosp. admits in  
populations with  
poverty and crowding
- ↑ Rate of hosp. in  
children; parents miss  
work
- More common than  
“common cold”

## Vaccine Hesitancy



- 3x ↑ in vaccine  
hesitancy among Black  
population
- ↓ trust among men
- ↓ trust in rural  
communities
- Role of social media in  
vaccine hesitance

## Other Concerns



- Screening
- Monkeypox
- Polio & measles
- Perpetuated myths

AAMR = age-adjusted mortality rate, POC = people of color, RSV = respiratory syncytial virus

Centers for Disease Control and Prevention (CDC). CDC Website. 2022. <https://www.cdc.gov/flu/fluview/dashboard/vaccination-dashboard.html#:~:text=Flu%20Vaccination%20Coverage&text=9.5%20percentage%20points%20lower%20this,season%20compared%20with%20March%202020>. Accessed September 16, 2022.

Gawthrop, E. American Public Media (APM) Research Lab Website. 2019. <https://www.apmresearchlab.org/covid/deaths-by-race>. Accessed September 29, 2022. Haukoos J, et al. *J AM Coll Emerg Physicians Open*. 2020;1(4):484-486. Holmen JE, et al. *BMC Infect Dis*. 2021;21(1):293. McElfish PA, et al. *J Prim Care Community Health*. 2021;12:21501327211040746.

# **What Can We Do to Bridge These Gaps?**

## **Community-based Educational Design through Partnerships and Leveraged Resources**

# Proposed Strategic Blueprint – Vaccination Pilot Program

## Initiative Goals

1. Educate patients and community members to reduce disparities and improve health literacy on adult vaccination
2. Improve vaccination rates for underserved adults in 10 communities

The proposed initiative from CME Outfitters and NBCI will utilize the community survey and national data to address individual local community needs.

- Lack of health literacy on importance of adult vaccination in Black and Hispanic communities
- Lack of regular connection to a community provider to monitor vaccination schedule and provide patient education
- Impact of social drivers and stigma of vaccination in underserved communities
- Lack of transcultural resources for non-English speaking communities

## Vaccination Pilot Program

- Identify 10 communities in NBCI network based on survey for initiative
- Execute strategic blueprint
- Survey HCPs and community members for self-report feedback on initiative and improvement in initiative goals



## Scalable and Sustainable

- Vaccination program expansion to additional communities with tailored resources based on those community needs
- Apply pilot program design to other therapeutic areas of need in underserved communities

# Proposed Strategic Blueprint – Pilot Program

CMEO and NBCI will bring together key stakeholders including expert HCPs in vaccination disparities, community HCPs, church volunteers/representatives, pharmacists, and advocates/community members for a **1.5-day meeting** to review and address local gaps and confirm strategies to connect communities with health services and education.

Stakeholder  
Roundtable

From the roundtable, CMEO and NBCI will partner to **identify 10 communities** for a pilot initiative that combines strategies including HCP-led education, online education, and printed information to meet community members where they are in health literacy and connecting them to local services to improve vaccination rates.

Patient  
Education

Health  
Information

CMEO and NBCI will hold either **health sermons led by an expert HCP or health fairs with vaccination information/services** in the 10 communities. **Online, short webisodes** will be developed as additional resources related to specific vaccines. The established **NBCI Vaccine News** will feature a **special printed edition** handed out in the community at church services, shelters, local pharmacies, senior living facilities, correctional facilities, and community health centers. The edition will include a QR code/link to more information online and a **vaccination diary** for members to complete as they receive their vaccines

Health  
sermons/health  
info fairs

Online  
webisodes

Vaccine News  
Special Edition  
w/ Vaccine Diary

# Proposed Strategic Blueprint – Vaccination Pilot Program

## Stakeholder Roundtable

Individualizes the needs/gaps of the 10 identified local communities to develop tailored resources with HCP, community leader, and community member feedback

## Health Sermons

Presents evidence-based patient education on the important of vaccination, the appropriate schedule, and solutions to social drivers to communities where they are from trusted HCP congregant members

## Health Information Fairs

Addresses access to culturally sensitive information from local advocates and community HCPs in a safe environment to ask questions about science, access, and schedules

## Online Modules

Reinforces and reminds community members there is a trusted place to find vetted, evidence-based information on vaccination to build confidence in discussions with providers

## Vaccine News Special Edition

Provides community members with reminders of health information events, access to online hub, quick guide to adult vaccination schedule, and copy of vaccination diary. Addresses gap in underserved community members that may not have a regular provider or access to vaccination records in one place, by empowering them to manage their records as they access care

**NATIONAL BLACK CHURCH INITIATIVE**

**Please Get Vaccinated!**  
Our Goal-Vaccinate 65% Over The Next 10 Years

AMERICAN ACADEMY OF FAMILY PHYSICIANS

## AFRICAN AMERICANS AND LATINOS IMMUNIZE NOW!

THE CENTERS FOR DISEASE CONTROL (CDC) SAYS AFRICAN AMERICAN AND LATINO IMMUNIZATION RATES ARE DANGEROUSLY LOW

BLACK DOCTORS AND THE BLACK CHURCH ENCOURAGE IMMUNIZATIONS FOR THE ENTIRE FAMILY

Dr. Marcus C. Griffith, MD  
President of National Black Church Initiative  
"Ministers are not Doctors."

Dr. Tashana Lewis, MD  
President of the National Medical Association  
"Ministers are not Doctors."

Dr. Marcela Nunez-Smith, MD  
President and Chief Medical Officer  
"Ministers are not Doctors."

Dr. Tashana Lewis, MD  
President of the National Medical Association  
"Ministers are not Doctors."

### Immunization Rates in the African American Community

African American adults are less likely than non-Hispanic white adults to have received a flu vaccine in the past year or to have ever received the pneumonia vaccine. In 2018, Non-Hispanic Blacks aged 65 and older were 10 percent less likely to have received the influenza (flu) shot in the past 12 months, as compared to non-Hispanic whites of the same age group. African American children aged 19 to 35 months had comparable rates of immunization in 2017. African Americans are 10 percent less likely to have received a human papillomavirus (HPV) vaccine than white populations. Examples: Adults (Hepatitis) Percentage of adults ages 19-49 years, high-risk groups, who received 3 doses of the hepatitis B vaccination, 2018 **Non-Hispanic Black 35.4 Non-Hispanic White 43.6 Non-Hispanic Black /Non-Hispanic White Ratio 0.8**

Dr. Marcus C. Griffith, MD, says Black and Latino Physicians can better connect with vaccine-hesitant people of color. "When it's someone who looks like you, who lives where you live, goes to the same church as you — the same barbershop, the same church — it does help with that," said Dr. Griffith, a pulmonologist and obesity medicine physician with The Southeast Permanente Medical Group. Dr. Griffith's leadership in addressing vaccine hesitancy initially began around educating communities on the flu shot, which naturally transitioned into COVID-19 vaccination. He regularly speaks with patients from historically marginalized racial and ethnic groups — such as Black, Latino, and Native American populations — about vaccine hesitancy. NBCI: Are these patients sharing some of the reasons for their vaccine hesitancy with you? Dr. Griffith: One of the most troubling ones I had was a patient whom I encountered because she'd deteriorated quickly. She's a ventilator candidate. What was very disturbing to me—during this interview, I asked everyone about their vaccination status. And she said, "No." And I then wanted to find out why. Her explanation was that: She had never gotten sick before. She's never come down with the flu. She never had chicken pox. And she believes that she is immune and won't get COVID. And then she said, in fact, "I've been intentionally trying to catch it. Going around people who have tested positive so I can perhaps get this, get it naturally, and develop a natural immunity."

I pressed, and I said, "Please, that is not the way to go about doing this. It is unsafe. It's dangerous. That you have diabetes, you have severe obesity, you're at the greatest potential to have complications." I said, "This is not like a person who's in the water and it's shark-infested, and other people are being attacked by the sharks, but you haven't [been]. It's only a matter of time before the shark gets you, and you don't want to be a victim." And then I use those conversations to talk about this vaccine.

### NATIONAL FLU CAMPAIGN:

## NBCI 10 Year Immunization Program: 2020-2030

Improving immunization in the African American community (men, women, & children) for the next ten years for better health outcomes.  
NBCI is building a network of 25,000 black churches - VACC Churches

### Improving Adult Immunization Rates within Racial and Ethnic Minority Communities: Communication Strategies and Overcoming Vaccine Myths, Misinformation, and Barriers in January 2021

The American Academy of Family Physicians (AAFP) began work on the quality improvement (QI) project "Improving Adult Immunization Rates Within Racial and Ethnic Minority Communities." The project is funded by a grant from the Centers for Disease Control and Prevention (CDC). National Center for Immunization and Respiratory Diseases. The QI project aims to increase adult immunization rates in racial and ethnic minority communities by:

- Assessing current adult immunization rates
- Identifying barriers that affect vaccination rates
- Educating physicians and health care teams about adult immunizations
- Addressing misinformation and myths about vaccines
- Overcoming systemic barriers to vaccination
- Implementing evidence-based interventions to improve vaccination rates and measure success.

Twenty-four family physician practices participated in the project using the QI process and other evidence-based improvement strategies, such as Plan-Do-Study-Act (PDSA) cycles, to increase immunization rates in adult patients from racial and ethnic minority communities. Family physicians who provide continuity of care within the communities they serve are ideally suited to address gaps in immunizations. This two-part supplement series shares information and lessons learned by the participating practices on their journey to improve immunization rates in racial and ethnic minority communities. Part one (appearing in the [May/June 2021 issue of the JGIM](https://www.aafp.org/publications/journals/afp/abstract.asp?id=article&doi=10.1016/j.annals.2021.01.001), <https://www.aafp.org/publications/journals/afp/abstract.asp?id=article&doi=10.1016/j.annals.2021.01.001>) highlighted QI processes to reduce vaccine disparities, identified recommended adult vaccines and discussed their importance among racial and ethnic minority communities. This part focuses on practical strategies to communicate about immunizations, and discussed their importance among racial and ethnic minority communities. This part focuses on practical strategies to communicate about immunizations, and discussed their importance among racial and ethnic minority communities.

### The Role of Faith-Based Organizations in Improving Vaccination Confidence and Addressing Vaccination Disparities to Help Improve Vaccine Uptake: A Systematic Review

As of February 2023, the COVID-19 pandemic has resulted in over 756 million reported cases, and over 6.8 million deaths, and has impacted both adults and children around the globe [1]. A silent crisis has emerged as a result of a convergence of factors related to the pandemic, namely the significant decline in routine vaccinations across the life course, spanning decades of progress in achieving and maintaining high vaccination rates. According to World Health Organization (WHO) and United Nations Children's Fund (UNICEF) data, approximately 25 million children missed some routine vaccinations and close to 17 million children did not receive a single vaccine in 2020 [2]. This results in communities being placed at risk of vaccine-preventable diseases (VPDs), outbreaks, and certain cancers due to the resurgence of VPDs such as measles, with 121 cases occurring in 2022, and polio, underscoring the critical need to maintain high vaccination rates to curb further disease [3,4]. Furthermore, there is a disparate impact and a slower recovery of VPDs for the most vulnerable and underserved populations, widening pre-pandemic disparities [1,6,7,8,9,10].

As such, the COVID-19 pandemic has compelled communities and immunization programs to generate creative and sustainable solutions to this public health crisis. Often these solutions are deeply embedded in communities, such as faith-based organizations (FBOs). FBOs and faith-based engagement strategies have been the driving force of many previous collective efforts targeting other infectious diseases and public health emergencies [6,7,13]. FBOs are organizations whose philosophies are driven by certain religious beliefs, often including a social or moral component [14]. These entities have been shown to bring people together for positive purposes and can present powerful agents for health and justice [15,16,17,18]. As religion is a social determinant of population health, it functions through the work of social institutions [19]. Therefore, FBOs are key stakeholders in communities, they present a discernible and trusted public face to communities through acts of leadership and capacity for service to others [15,17]. The CDC workbook defines FBOs as "churches, synagogues, mosques, church sponsored service agencies, and faith and charitable organizations with religious affiliations"—this broad definition can therefore include nonprofit organizations with a religious affiliation or inspiration [18]. FBOs are driven by a desire to provide health care services, combating the growing unmet healthcare needs in their communities [19]. The social determinants of health are of importance to communities with minority and low socioeconomic groups and elsewhere where social and economic resources are limited, such as vaccinations [13]. <https://tinyurl.com/458a75a>

### Vaccine Education What is Immunization?

According to the Centers for Disease Control and Prevention (CDC), immunization is a process by which a person becomes protected against a disease through vaccination. Vaccination is the act of introducing a vaccine into the body to produce protection from a specific disease. Racial and ethnic minorities are disproportionately affected by vaccine-preventable diseases. African Americans are nearly twice as likely as whites to be hospitalized for influenza [4] and Hispanics are also more likely to be hospitalized for influenza [4]. African Americans and Native Americans are also more likely to be hospitalized for pneumonia compared to whites [4]. Moreover, African American hospitalized for pneumonia are more likely to die within the hospital and have a longer length of stay compared to White [4]. Numerous social, economic, and geographic determinants contribute to the disproportionate burden of vaccine-preventable diseases borne by minority populations. Individuals living in impoverished, crowded conditions, and households headed by families are more likely to be hospitalized for influenza [4]. Living in a socioeconomic deprived neighborhood is also a risk factor for higher mortality among those hospitalized for pneumonia [4]. Geographic areas with higher proportions of African Americans such as the Southeastern United States have higher pneumonia-related hospitalization and mortality rates in comparison to regions such as the West where there are fewer African Americans [4].

### Black Communities Endured Wave of Excessive Deaths in the Past 2 Years, CDC Find

#### Some Deaths Link to the Lack of Proper Immunization and Education

America's Black communities experienced an excess of 1.6 million deaths compared with the White population during the past two decades, a staggering loss that comes at a cost of hundreds of billions of dollars, according to two new studies that estimate a potential reduction in health disparities and inequality. In one study, researchers concluded that the gap in health between Black and White mortality rates had been eliminated. The second report determined the price society pays for failing to achieve health equity and allowing Black people to die prematurely: \$238 billion in 2018 alone. Last year, the CDC released a report that says that the excess deaths and years of life lost "are a collective challenge as a country because it hurts all of us deeply," said Marcela Nunez-Smith, Associate Dean for health equity research at Yale University and co-author of the study on excess deaths and years of life lost. "All of the potential. Which one of those people whose life was cut short was on the way to some scientific discovery that would transform all of our lives or create beautiful art and music?" Who among them was going to be a spiritual or religious leader? Not to mention the economic impact." <https://tinyurl.com/3ymnsmk>

### "Vaccination is the act of introducing a vaccine into the body to produce protection from a specific disease."

Vaccine-preventable diseases are responsible for a substantial degree of morbidity in the United States as over 18 million annual cases of vaccine-preventable disease occur in the U.S. annually. The morbidity due to vaccine-preventable disease is disproportionately borne by adults as over 90% of the deaths due to vaccine-preventable diseases occur within adults, and national data indicates that there are racial disparities in the receipt of vaccines intended for elderly adults.

Vaccines play an invaluable role in preventing morbidity and mortality associated with infectious diseases. Vaccination within the United States saves 12,000 lives and prevents 30 million cases of disease annually. While vaccination rates among children routinely exceed 90%, adults have suboptimal vaccination rates and preventable diseases occur among adults. And over 18 million cases of these diseases occur in adults each year with an economic burden of \$9 billion. The most common vaccine-preventable disease is influenza, which typically affects more than 10 million adults in the United States annually. Although the annual incidence of influenza is slightly greater among adults younger than 50 adults over age 50 have far higher mortality rates due to influenza. Non-influenza vaccine-preventable diseases such as pneumonia and herpes zoster occur more frequently in elderly adults at least 50 years old and are more likely to lead to fatality in older adults.

### Measles Outbreak Across the United States

#### CDC Says This is Preventable

The Florida measles outbreak, particularly among primary schools, represents a preventable crisis that will undeniably disproportionately impact Black and Latino communities. The failure to safeguard these marginalized children directly rests on the shoulders of Surgeon General Joseph Ladapo, who serves under Gov. Ron DeSantis. Even amidst the peak of COVID-19 and the surge of cases in the Sunshine State, the significance of immunization in Florida did not deter DeSantis and Ladapo. Both men continued advocating for the reopening of Florida and the resumption of in-person schooling despite mounting allegations of governmental oppression and the perceived prioritization of personal freedoms over public health concerns. In response to the measles outbreak, Ladapo sent a letter to elementary school parents stating that it is "normally recommended" for unvaccinated children who have not had the disease before to stay home for three weeks to avoid getting infected. However, he also mentioned that the state would not enforce this, leaving the decision about school attendance up to parents or guardians.

The consequences of maintaining such dangerous positions are now wreaking havoc on students who should have been vaccinated, not only for COVID-19 but also for measles. Broward County, with Black, Hispanic, and Latino demographics comprising a little more than 30 percent and 32 percent, respectively, already faces a significant immunization disparity. <https://tinyurl.com/3da4589>

### How To Increase Compliance and Improve the Immunization Vaccine Rate in Your Community

All community-based immunization programs need to be both broad-based and comprehensive. There needs to be a full court community response consisting of not limited to state and local health departments, the pharmaceutical industry, non-profit health entities, clinics, churches, school systems, parents and civic associations working together to implement NBCI community-based immunization vaccine program. The first order of business is to get everyone on the same page focusing on education, targeted health literature and vaccine campaigns in all the above location cited. The messaging and social media campaigns should be coordinated with local, regional and cable television stations as a part of their community service announcements. NBCI churches will open up its doors to hold monthly meetings of all the major community based stakeholders. There should be at least one to two community events every month at every locality focusing on immunization vaccines for the entire family.

### NBCI Immunization Tracker and Our Spot-Check Strategy

NBCI Immunization Tracker and Our spot-check strategy are tools we are now employing to access the progress of our immunization program. The tracker allows us to know the effectiveness of our campaign by tracking the number of people from our church and community at large who is getting their vaccination completed. It also allows NBCI to understand its social media, outreach, partnership, literature distribution campaign and to find out in real-time how effective it is and rather or not its need fine-tune. Several of our partners in this campaign are the 10,000 community-based clinics, National Medical Association, National Hispanic Medical Association, Association of State and Territorial Health Officials (ASTHO).

The NBCI Clinical Team asked that we employ our spot-check strategy concerning the new COVID vaccine. NBCI possesses several tactics and strategies to check on our community concerning any issue that confronts it. Our spot-check strategy allows us to reach into any community to get a broad-based picture of what is going on in their community concerning a certain issue, especially in the case of a health emergency. We are presently employing this same tactic in the greater Houston area concerning syphilis and African American men. Under the direction of our clinical team, we are reaching into a thousand zip codes throughout the country that have over 35 percent African American demographics. What they wanted to find out was answers to three questions concerning the new COVID vaccine or any immunization vaccine they are. Have you heard about the new COVID vaccine or any immunization vaccine? Do you plan to get the new COVID vaccine or any immunization vaccine? Do you know the availability of the new COVID vaccine or any immunization vaccine in your community? And is there anyone who is uninsured having to get the vaccine from their local pharmacy? We are tabulating the data, and it will be available by mid-November 2023. We are conducting this survey through our website, email blasts, text messages, and our social media platform.

Please circle all of the immunization shots you and your family have taken to date

Birth to 15 Months

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2).

Newsletter  
developed by  
NBCI for  
distribution  
among  
members for  
improved  
vaccine  
knowledge.